

Title (en)  
MULTI-SENSOR IRRADIANCE ESTIMATION

Title (de)  
MEHRFACHSENSOR ZUR SCHÄTZUNG DER BESTRAHLUNGSSTÄRKE

Title (fr)  
ESTIMATION D'ÉCLAIREMENT ÉNERGÉTIQUE À L'AIDE DE PLUSIEURS CAPTEURS

Publication  
**EP 3571480 A4 20210224 (EN)**

Application  
**EP 17892899 A 20171214**

Priority  
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• US 2017066524 W 20171214

Abstract (en)  
[origin: WO2018136175A1] The present disclosure is directed to devices and methods for simultaneously sensing irradiance with multiple photo sensors having different orientations, and determining direct and scattered components of the irradiance. One such device includes an aerial vehicle and an irradiance sensing device. The irradiance sensing device includes a base structure mounted to the aerial vehicle, and the base structure including a plurality of surfaces. A plurality of photo sensors are arranged on respective surfaces of the base structure, with each photo sensor having a different orientation.

IPC 8 full level  
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**G01J 1/0266** (2013.01 - EP US); **G01J 1/4204** (2013.01 - EP US); **G01J 1/4228** (2013.01 - EP US); **G01S 3/784** (2013.01 - EP); **G05D 1/0088** (2024.01 - US); **G06T 7/0004** (2013.01 - US); **H04N 23/54** (2023.01 - US); **H04N 23/90** (2023.01 - US); **B64U 2101/30** (2023.01 - EP US); **G01J 1/0425** (2013.01 - US); **G06T 2207/30188** (2013.01 - US)

Citation (search report)  
• [XYI] CN 101750068 A 20100623 - UNIV SUZHOU, et al  
• [IY] US 2016237745 A1 20160818 - WEN YAO-JUNG [US], et al  
• [Y] US 2016232650 A1 20160811 - CHRIST JOHN RANDALL [US], et al  
• [A] US 2013266221 A1 20131010 - KANEKO EIJI [JP]  
• [XYI] SASTRY S ET AL: "Attitude Control for a Micromechanical Flying Insect via Sensor Output Feedback", IEEE TRANSACTIONS ON ROBOTICS AND AUTOMATION, IEEE INC, NEW YORK, US, vol. 20, no. 1, 1 February 2004 (2004-02-01), pages 93 - 106, XP011107215, ISSN: 1042-296X, DOI: 10.1109/TRA.2003.820863  
• See also references of WO 2018136175A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2018136175 A1 20180726**; CN 110291368 A 20190927; EP 3571480 A1 20191127; EP 3571480 A4 20210224; EP 3571480 B1 20241211; JP 2020515809 A 20200528; JP 7321093 B2 20230804; US 11290623 B2 20220329; US 2018343367 A1 20181129

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**US 2017066524 W 20171214**; CN 201780083888 A 20171214; EP 17892899 A 20171214; JP 2019529189 A 20171214; US 201816037952 A 20180717